BRUHAT BANGALORE MAHANAGARA PALIKE

BILL OF QUANTITIES (BOQ)

NAME OF THE WORK:-Establishment of RO plant children play eyuipments and open gym equipments in Kempapura and surrounding areas in ward no.07, Byatarayanapura Kodigehalli Sub Division.

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
1	36.26	KSRB 2-1.1: Earth work in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications, Specification No KBS 2.1(a) / 2.3.1, No. 5 / Item No. 2.1	cum	166.42	Rupees One Hundred Sixty Six and Forty Two Paise Only
2	7.41	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. No. 12 / Item No. 4.3 /	cum	5159.02	Rupees Five Thousand One Hundred Fifty Nine and Two Paise Only
3	2.45	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. No. 12/ Item No. 4.6	cum	5767.46	Rupees Five Thousand Seven Hundred Sixty Seven and Forty Six Paise Only
4		Providing and fixing open gym euipments and children play equipments in Amruthalli.,			
5	1	TMP 013 WONDER PLAY	Nos	2202026	Rupees Two Million Two
7	12.06	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 23 / Item No. 5.6 /	cum	4521.96	Rupees Four Thousand Five Hundred Twenty One and Ninety Six Paise Only
8	4.50	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 23 / Item No. 5.9 /	cum	5405.40	Rupees Five Thousand Four Hundred Five and Forty Paise Only
9	18.79	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification No. KBS 2.9 Page No. 6 / Item No. 2.10	cum	137.16	Rupees One Hundred Thirty Seven and Sixteen Paise Only
10	10.92	Providing flooring with 60 cms.x 60 cms. size Vitrified glazed tiles of approved quality & make, fixed on top of existing flooring fixed with suitable adhesive, including cutting the tiles to the required size and fixing etc., complete Page No. 107, Item No. 14.44,	cum	1154.52	Rupees One Thousand One Hundred Fifty Four and Fifty Two Paise Only

2/03
Executive Engineer
Byatarayanapura Division
BBMP, Bangalore-92

2/03

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010

Signature of the contractor

Executive Enginee

Sl. No.	Approved Qty.	Description	Unit	Issued to Technical Manager , KRIDL	
				In Figures	In Words
11	1.00	Providing revsrse osmosis suystem to cover 2000 Liters of High TDS water per hour **TECHNICAL SPECIFICATIONS** RAW WATER PUMP Purpose:- To feed the Dual Medial filter at pressure more than 2.00 bars which is min operating pressure for filter? **SAND MEDIA FILTER** Purpose:- To remove the total suspendred solids, dirt, iron and reduce silt density index which can foul the members Purpose : To dose anti scaling chemical to protect the scaling formation on RO Membrane MICRON FILTER Purpose : To remove the fine particles ip to 05 microns and reduce silt density levels to acceptable level HIGH PRESSURE PUMP Purpose : To feed the reverse Osmosis membrane at pressure more than the osmotic pressure taking into consideration flux rate, flow and recovery **RO membrane housing.** Purpose : To remove the major part of TDS into 98% by Reverse Osmosis Membranes arranged and designed to give adequate flow the Recovery. RO CLEANSING SYSTEM ELECTRICAL PANEL Purpose : A control panel is provided as a safety measure for the pumps & other electrical items. Specifications a) Complete starters, overload relays, b) Voltmeter, Ammeter, MCB's indicating lights, c) Rocker switches for Dozers, d) incomers, Auto-Manual switches. INSTRUMENTATION PH DOSING SYSTEM Purpose to dose sodium Bi-carbonate for enhances product water SS till	Nos	946000	Rupees Nine Hundred Forty Six Thousand Only
12	1.00	Providing and Construction of pup panel cabin MS material vetical 50 x 100 mm thick tube, rafter 50 x 100 mm thick rectangle tube 50 x 50 mm thick tuve purlines, roof panel of 30 mm sandwitch puf panel density : 40 kg and wall panel of 30 mm sandwitch puf pannel density : 40 kgs (polyurethane foam) with noth side G I Colour coated sheet ancillaries like C-channels, angles, sealene etc, door of size 1.8 x 2.0 m an alluminium powder coated window of size 1.00 x 2.00 m 1 No of structural glazing (fixed and sliding One side slope as per elclosed drawing cabin of size etc (Approved Quoated Rate) (10 x 12 Ft)	Nos	250204.80	Rupees Two Hundred Fifty Thousand Two Hundred Four and Eighty Paise Only

1. The work should be executed as per the specification and standard specified by the PWD & Other specifications of the Bangalore Mahanagara Palike and as directed.
2. The work should be carried out as per the directions and instructions of the concerned Engineer
3. The Contractor should maintain the quality of work as per the standard specifications.

2/03

Executive Engineer (Byatarayanapura)
Bruhath Bangalore Mahanagara Palike

I am prepared to take up the above work at the rates quoted by me in the Schedule 'B'.

02/03

CONTRACTOR

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 010